ADVANCED DISTRIBUTED LEARNING

The New ADL Registry

ADL Registry Web Portal Changes

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ADL Registry Web Portal Changes

Eric Sakmar





ADL Registry Informational Site

- http://www.adlnet.gov/Technologies/adlr/
 - News and Announcements
 - Frequently Asked Questions (FAQ)
 - Documentation
 - Events and Event Registration



ADL Registry Functional Site

- http://adlregistry.adlnet.gov
 - Search
 - Contribute
 - Register Repositories and Contributors
 - Practice Registry
 - Help and Contact Information



ADL Registry Changes





ADL Registry Changes

- Identifiers
- Registry Transaction Envelope
- LOM Overview
- Search Results



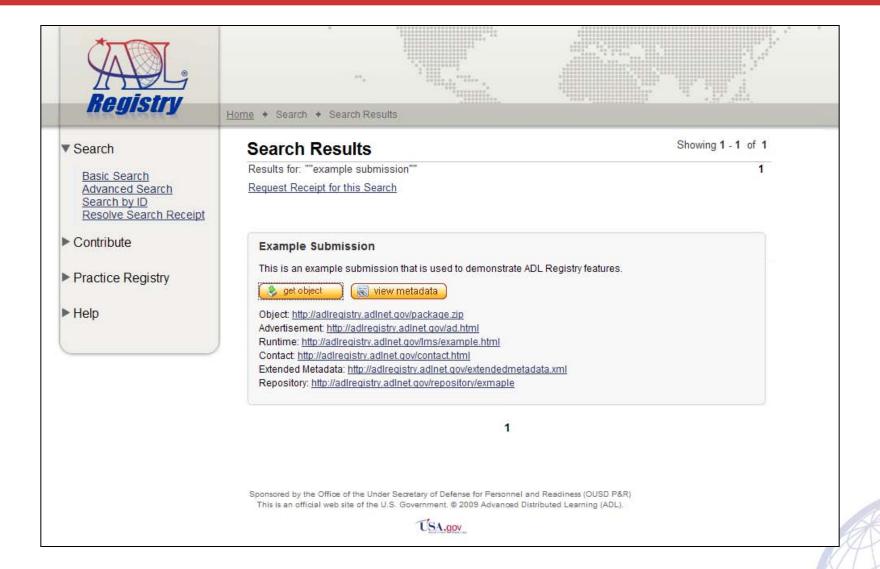


Registry Transaction Envelope

- Multiple, Typed URLs
- Types of URLs
 - object Direct link to the object itself, no authentication required
 - advertisement link to information about the object (preview, screenshot, etc.)
 - runtime link to the object in a runtime environment
 - contact link to information about a contact through which the object may be requested
 - extended metadata link to additional metadata
 - repository link to the object in a repository, authentication may be required



Search Results





ADL Registry 1.7 Metadata Changes



LOM Changes Overview

- 'conformance' was replaced with 'compliance'
- 'content object' was replaced with 'object'
- Additional support for Educational Objectives and Competencies
 - Represented in <classification> elements
- Additional values for 'complies with' classification
- Additional values for 'object type' classification



- 'conformance' to 'compliance'
 - LOM Classifications
 - 'conforms to' >> 'complies with'
 - 'ADL/DOD Conformance Taxonomy' >> 'ADL/DOD Compliance Taxonomy'



- 'content object' to 'object'
 - XML Elements
 - contentObjectDescriptor >> objectDescriptor
 - cordraContentObject >> cordraObject
 - contentObjectIdentifier >> objectIdentifier
 - contentObjectLocation >> objectLocation
 - communityContentObject >> communityObject
 - LOM Classifications
 - 'content type' >> 'object type'
 - 'ADL/DOD Content Type Taxonomy' >> 'ADL/DOD Object Type Taxonomy'
 - 'ADL/DOD Content Category Taxonomy' >>
 - 'ADL/DOD Object Category Taxonomy'



- Additional support for Educational Objectives and Competencies
 - Create a lom:classification element
 - Set value to lom:classification/lom:purpose/lom:value 'educational objective' or 'competency'
 - Set values for
 - Iom:classification/lom:taxonPath/source
 - Iom:classification/lom:taxonPath/lom:taxon/lom:id
 - Iom:classification/lom:taxonPath/lom:taxon/lom:entry



- Additional values for 'complies with' classification
 - SCORM 2004 3rd Edition
 - SCORM 2004 4th Edition
 - SCORM Version 1.2
 - \$1000D V2.0
 - S1000D V2.1
 - S1000D V2.2
 - S1000D V2.3
 - \$1000D V3.0
 - \$1000D V4.0
 - IEEE 1484.20.1-2007 RCD
 - other



- Additional values for 'object type' classification
 - SCO
 - aggregation
 - other



ADL Registry Use Cases

Jason Haag



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Introduction





Overview

- Success Stories (Navy & JKDDC)
- Similar Challenges

Technical Approaches



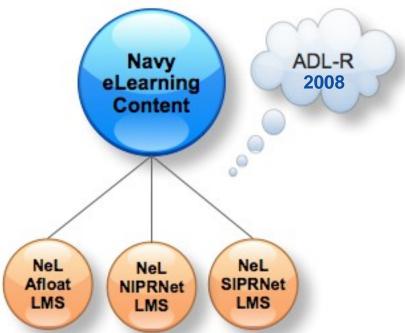
Primary ADL Registry Contributors

Contributor	Records	Entry Date
Navy eLearning (US Navy)	2,086	08/05/2008
Joint Knowledge Development and Distribution Capability (JKDDC)	127	4/01/2007
Defense Ammunition Center	76	09/08/2008



Use Case: U.S. Navy

 Currently deploys more than 4,000 custom catalog items (content packages) to multiple environments and platforms





U.S. Navy Organizational Challenges

- Lack of consistent metadata for learning content
 - Most content was created prior to the establishment of Navy content development policy, guidelines, and DoD Instruction 1322.26
- Many learning programs in "legacy state" of maintenance
 - Lack of funding and/or resources to move to a more mature state of life-cycle management



U.S. Navy Technical Challenges

- Metadata was available for all of the learning content, but it was not always included in the SCORM content package
 - Hosting process required manual input into the LMS but only course-level (aggregate)
- CMAD Repository was no longer operational
 - R&D project unable to transition to enterprise data center
 - Provided capability to populate ADL-R using RIM-LITE
- Lack of tools for new content development efforts
 - All new metadata would have to be updated/modified by the technical implementer to support the ADL-R



U.S. Navy Situation

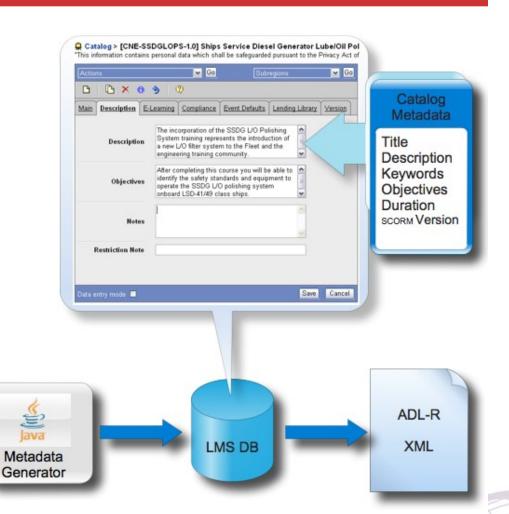
- All metadata wasn't always included in the content package
- The Navy's LMS contained this metadata for each catalog item (course aggregation)
 - Title
 - Description
 - Keywords
 - Instructional Hours (Duration)
 - SCORM Version



U.S. Navy Approach

Populate the ADL
 Registry with a single insert transaction file generated by the custom utility

 Develop utility to extract metadata from the LMS





/lom:typicalLearningTime>

U.S. Navy Approach

```
<lom:identifier>
       <lom:catalog>NeL</lom:catalog>
       <lom:entry>R-500-0140/02PG
     </loa:identifier>
     <lom:title>
       <lom:string language="en-US">NROWS Orders Administration Course/lom:string>
     </loan:title>
     <lom:keyword>
       lom:string language="en-US">NROWS</lom:string>
     </lom:kevword>
     <lom:keyword>
       <lom:string language="en-US">Orders
     </lom:keyword>
     <lom:keyword>
       <lom:string language="en-US">Administration
     </lom:keyword>
     <lom:keyword>
       <lom:string language="en-US">Course
     </lom:keyword>
     <lom:description>
<lord>
< | on: String | language = "en-US" > The NROWS Orders Administration course is designed primarily for Unit Reviewers and Unit Approvers but contains an overview of the order submission and approval process from which all Members will benefit. This course provides an introduction to AT/ADT/IDTT Orders Policy; NROWS Roles
and Responsibilities; Maintaining NROWS; Unit Reviewer and Unit Approver Menus and Procedures; Order Writing Authority (OWA) and Orders Specialist (OS) Menus;
Orders Verification Submission and Approval; Email Notifications; and NROWS Reports.
     /lom:description>
       <lom:source>ADL-Rv1.0</lom:source>
       <lom:value>conforms to</lom:value>
     </lom:purpose>
     <lom:taxonPath>
       <lom:source>
          <lom:string>ADL/DOD Conformance Taxonomy</lom:string>
       </low:source>
       <lom:taxon>
          <lom:entry>
            <lom:string>SCORM Version 1.2
          </lom:entry>
       </lom:taxon>
     </lom:taxonPath>
  <lom:educational>
     <lom:typicalLearningTime>
       <lom:duration>PT8H0M0S</lom:duration>
```



U.S. Navy Approach

 Populate the ADL Registry with a single insert transaction file generated by the custom utility



ADVANCED DISTRIBUTED LEARNING

Use Case: JKDDC





JKDDC Technical Challenges

- Lack of metadata for learning content
 - Majority of the content was created prior to the establishment of DoD Instruction 1322.26
- Metadata was not always included in the SCORM content package
 - Would have to manually create metadata using source materials



JKDDC Approach

- Reviewed each piece of content
 - Used instructional lesson plans, storyboards, etc. to locate relevant metadata
 - Manually created new metadata and entered it into a database that supported
 - Title
 - Description
 - Keywords
 - Duration
- Created wrapper utility to generate XML for the ADL Registry
 - Each insert file contained 20 content aggregation records



U.S. Navy & JKDDC Current Status



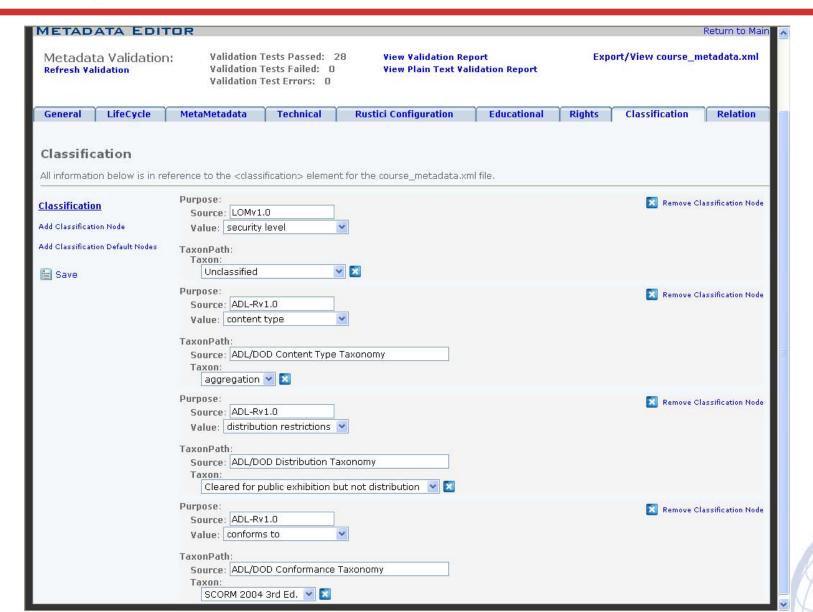


Current Status – U.S. Navy

- NeL in-house content deployment tracking application doesn't currently support ADL Registry
 - Navy lacks funding and additional resources to update this application
 - Manual ADL Registry population could be automated if an interface for RIM-LITE were added
 - NeL TestTrack Metadata Editor supports new content development efforts to include all LOM elements and ADL Registry-specific metadata



U.S. Navy Metadata Editor Support for ADL Registry



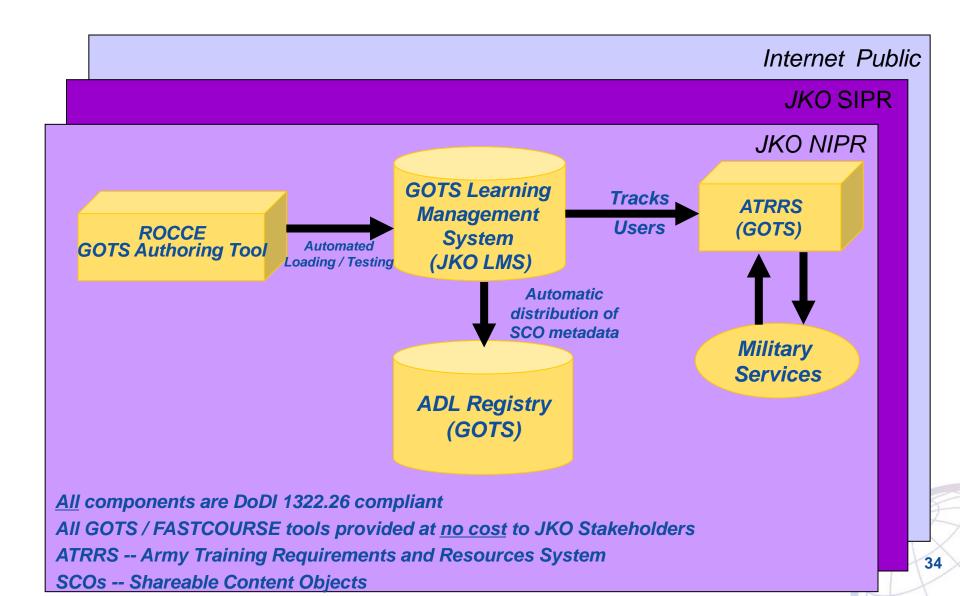


Current Status - JKDDC

- Uses a Rapid Online Content Creation Engine (ROCCE) to create metadata as part of the Atlas Pro Engine
 - Atlas Pro LMS supports RIM-LITE
 - ADL Registry is currently a public registry
 - JKDDC will resume ADL Registry updates when a miliraty domain (.mil) network is available.



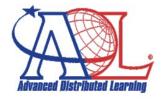
JKO Joint Content Management Architecture





Summary

- Don't let technical challenges stand in your way
 - Locate metadata outside of the content package
 - Instructional Plans
 - LMS DB
 - LCMS
 - etc.
 - Contact ADL for support



Resources

- ADL Initiative
 - http://www.adlnet.gov/
- ADL Registry
 - http://adlregistry.adlnet.gov/
- Navy eLearning Content Team
 - https://www.netc.navy.mil/ile
- Joint Knowledge Online
 - http://jko.jfcom.mil/



References

- The ADL Registry and CORDRA, Volume 2: ADL Registry Overview and User Guide
 - http://adlregistry.adlnet.gov/
- DoD Instruction 1322.26, Development, Management, and Delivery of Distributed Learning, June 2006
 - http://www.dtic.mil/whs/directives/corres/html/132226.htm



Questions or Comments?

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